# Cultural Transformation at ThedaCare with Lean

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Is a comprehensive, community-owned healthcare system focused on achieving measurable, better value for our customers. Our mission is to improve the health of our communities.

#### Appleton Medical Center

160-Bed Acute Care Medical Center

#### ThedaCare Physicians

Employing Over 125 Physicians At 22 Locations

#### Ingenuity First Offers Innovative

Solutions to Employers For Health Care Costs

#### Gold Cross Ambulance Service

Jointly Owned With Affinity Health Systems

#### Theda Clark Medical Center

260-Bed Acute Care Medical Center

#### **Orthopedics Plus**

The New Standard for Quick, High Quality Orthopedic Services In The Fox Cities

#### Fox Cities Community Clinic

A Free Clinic Jointly Owned With St. Elizabeth Hospital

#### ThedaCare at Work

Occupational and Employee Health Services, Employee Assistance Program

#### New London Family Medical Center

25-Bed Acute Care Medical Center

#### ThedaCare at Home

Home Health, Hospice, DME, Respiratory Therapy, Infusion, Pharmacy Services

#### The Heritage/ Peabody Manor

Continuing Care Campus for Older Adults

#### Riverside Medical Center

25-Bed Acute Care Medical Center

#### Shawano Medical Center

25-Bed Acute Care Medical Center

#### ThedaCare Behavioral Health

Inpt and Outpt Mental Health, Substance Abuse Services



## **Vision**

### a picture of the ideal state to be achieved

"To always set and deliver the highest standard of health care performance in measurable and visible ways so our customers are confident they are making the right decision in choosing us."



## **Strategy**

The sum of all the things we do differently from our competitors that create a unique value in the eyes of the customer.

We will become a vibrant, growing health care <u>destination</u> by providing a measurably better value to our customers.



## ThedaCare's Journey

- Identified a need.
- 2. Found a coach.
- 3. Began experimenting with Rapid Improvement Events lots of opportunity.
- Strategy Deployment.
- 5. Focus on Value Streams.
- 6. System-wide teaching.
- Developed a management system.
- 8. More emphasis put on people development.
- Organizing leadership by business line/ value streams.



# Is There a Sense of Urgency in Healthcare? How about in your field?



## What is a Rapid Improvement Event?

- A two to five-day focused improvement activity.
- It has aggressive, measurable objectives.
- Emphasis on the elimination of unnecessary non-value-adding activities.
- Rapid Implementation (during the event).







## **Team Daily Guide**

#### Monday

- Gain an understanding of Background/Current Conditions.
- Go to *Gemba* watch the work!
- Brainstorm an Ideal State.

#### **Tuesday**

- Create a future state.
- Problem solve.
- Experiment trial and testing.

#### Wednesday

- Experiment trial and testing.
- Create standard work.

#### **Thursday**

- Finalize standard work.
- Set up visual management for metrics.

#### **Friday**

- Share your team results.
- Celebrate your success.



## **Rapid Improvement Events**

- Followed and taught PDSA cycle.
- Implement changes on the next Monday.
- Got staff from many areas involved.
- Learned by doing this was hard!
- Addressed a lot of "low-hanging fruit."
- Much emphasis on financial goals.

## Rapid Improvement Events

#### **Lessons Learned:**

- Not enough experimenting during the week

   initially spent a lot of time with P, and a
   little D, and almost no S & A.
- Follow-up is critical post event learning the hard way.
- Communication with stakeholders is essential.
- Leadership is essential.

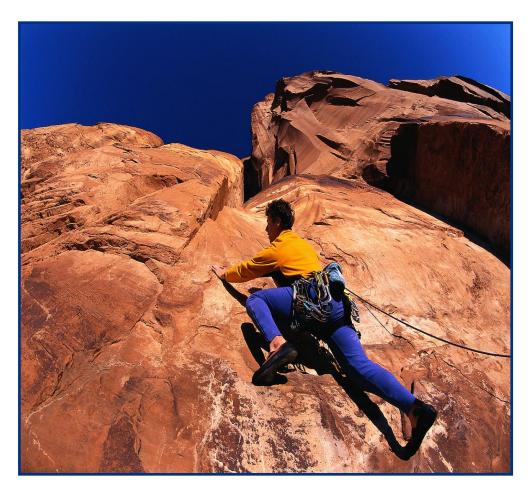


## My Story

- Staff therapist
- Manager



- Managed by results.
- Managed from my office.
- Problem-solver (i.e. Staff brought problems to me & I tried to solve them.)





# ThedaCare Adopts Lean Methodology

- Leading Rapid Improvement Events (16 over 4 years).
- "Drive-by" events.
- Believing that the work was done when the event was done.
- Implementing PDSA around process without understanding the need to lead differently.

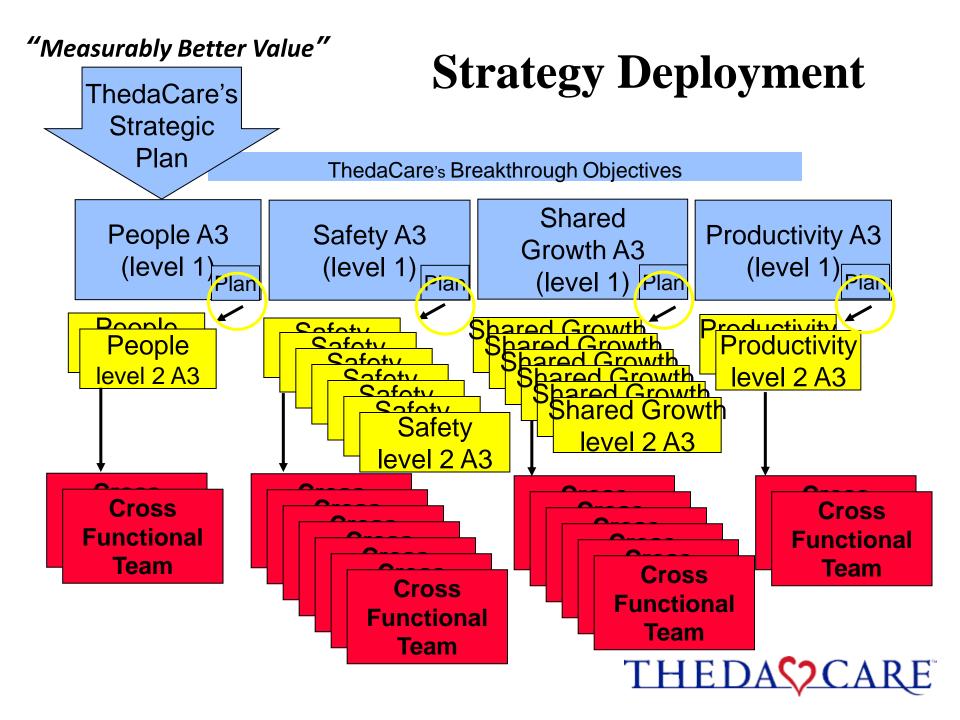
"We have been trying to add Toyota Production System practices and principles on top of our existing management thinking and practice without adjusting that thinking and practice."

--Mike Rother from Toyota Kata



## **Strategy Deployment**

- A management system that aligns both vertically and horizontally – an organization's functions and activities with its strategic objectives.
- A specific plan is developed with precise goals, actions, timelines, responsibilities, and measures.
- Strategy Deployment is a PDSA process.



## Safety/Quality 50%

- Preventable Mortality
  - Medication Errors

## Customer Satisfaction

- -Access
- Turnaround Time
- Quality of Time

### **People**

- OSHA Recordable Injuries
- HAT Scores
- Employee Engagement Index

### Financial Stewardship

- Operating Margin
- Productivity



#### Area True North Metrics Improvement Center Financial Stewardship True\_North Truc North True North True North sales Qualit Charlesons Operating Margin Patient Falls Increase Bed Capacity Reduce Medication Errors Sprains & Strains Achieve Budgeted INCREASE BED CAPACITY REDUCE SPRAINS & STRAINS Reduce Patient Falls REDUCE MEDICATION OSHA RECORDABLE RATE Operating Margin **ERRORS**



## System-wide teaching — day long session for 5,000 employees

- Why you chose healthcare.
- Compelling case for change what's happening in our industry.
- Changing forces in healthcare.
- Why do we need the ThedaCare Improvement System?
- Change/Barriers to change.
- Seeing Waste.
- 5S.
- PDSA.
- · Assignment.



## Value Streams

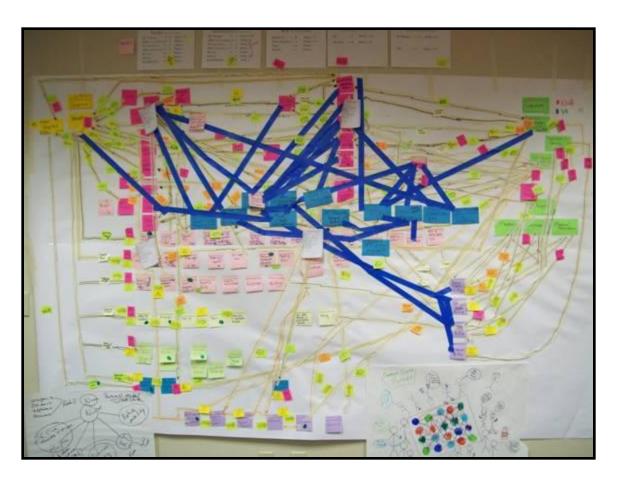
- Value Stream Analysis.
- 12-18 months of RIEs, Projects, and JDI.
- Activity once a month: 7-week cycle.

### **Lessons Learned:**

- Pace of work.
- Ability to sustain.
- Focus.



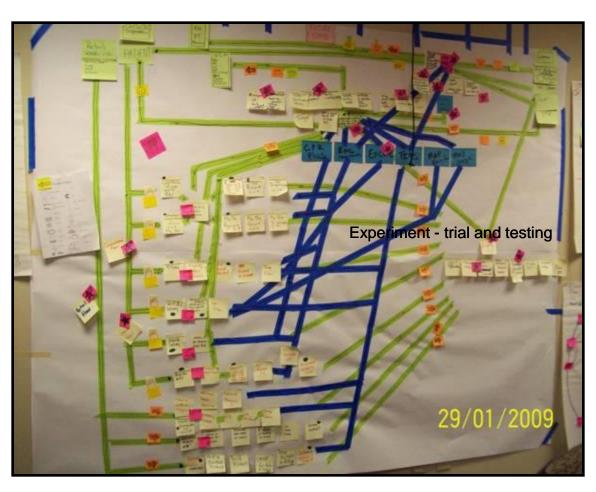
### **TCAH VSM Initial State**



- Excessive calls to patient.
- **8** intake locations.
- •12 information flow systems.
- Multiple monthly bills.
- Various scheduling systems.
- Billing function as a catch all at the end of process.



## **Future State Map**



- 1 Monthly Bill!!
- Single contact for patient / Family.
- One phone number for clinicians or referral sources to call into.
- 6 Information systems.
- Integrated scheduling system.
- 1 Intake location.



## **Continuous Daily Improvement**

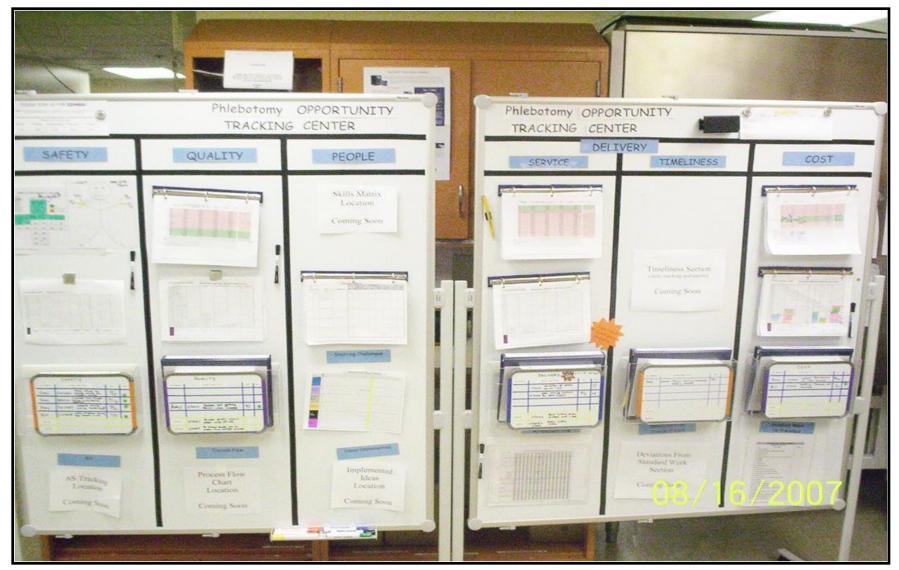
- Staff Involvement in Problem-Solving.
- Rigor of daily "Gemba".
- Opportunity Tracking Centers.

### Lessons Learned:

- Gemba became a tracking board.
- Focus to drive results.
- Competing Priorities.
- Leadership Discipline.



## **Opportunity Tracking Center**





## Flow of the "Lanes"

**Performance** (tracking sheet)

**Problems** (pareto sheet)

**Solutions** (A4s/Actions related to lane)



## **Business Performance System**

- Daily Stat Sheets.
- Leader Standard Work.
- Daily Performance Huddles with Team.
- Monthly Scorecard Reviews.
- PDSA thinking.
- Process Observation Calendaring.

## **Stat Sheet/ Scorecard**

_										
	3SW Weekly Stat Sheet									
		Mon	Tues	Wed	Thurs	Fri	Sat	Sun	- Total	Notes:
	Date								TOLAI	140100.
	Know or anticipated safety risks for patients/staff									Monday
	Near misses									
جے	Falls#High Risk									
Safety	Employee Injuries									
	Medication (delays, defects)									
	Incident reports									Tuesday
-										
	Anything you would "flag"									
	as a quality issue (potential issue?)									
Quality	Deviations from Key									
19	elements of SW									
ð	Bundle compliance (CHF/Pneumonia)									

Watch Indicators: The Performance we are watching and may only respond to if the metric is changed to a DRIVER.										
Measures	Watch Indicator	Owner	Target Range	Baseline		Jan	Feb	Mar	Apr	May
Safety	Reduce the number of patient falls / 1000 days by 20 % compared to 2008	AF	2.3	2.88	Actual	0	3.51	0	0	0
Salety					YTD	0.00	1.68	1.08	0.79	0.62
Ouality	Increase the accuracy of medication administration documentation so that the recorded times are withing 60 mins of the actual given time	AF	95%	91.70%	Actual	93.01%	93.12%	94.97%	98.00%	96.88%
Quality					YTD	93.01%	93.06%	93.74%	94.80%	95.07%
	Reduce Sprains & Strains by 50 %	AF	0.00	10 / γear	Actual	1.0	0.0	0.0	0.0	0.0
(Measure: # sprains/strains/ 2080 hours) Safety		. "	5.00		YTD	1.0	1.0	1.0	1.0	1.0

## **Leader Standard Work**

	TC OB Day Lead Standard Work									
Last Updated	4/20/09	Owner	Jen Fredriksen	Performed By	0600 OB clinical Lead	Work	1			
		Revised By	Jen Fredriksen	Rev. Number	5	In				
Jakt Time	12 hours	Trigger	New Shift begins	Done	Lead report to next shift	Process				

#### Leader Standard Work

- Start new Standard Work sheet for each shift
- Document item completed in □ column
- Record comments for not completing during scheduled time and other defects noted
- Complete daily tracking and pareto
- Store in Lead Standard Work binder in Lead office for future reference

Time	Major Steps	Details	<b>✓</b> □	Comments
0600-	Lead Report	-See Lead to Lead Report SW		
0630				
0630-	Stat sheet	-Discuss with manager		
0700				
0700-	Rounding Gemba	-1:1 with each staff member		
0730		-Determine support if needed		
		-See rounding standard work		
0730-	Prep for huddle	-Review production board for chart audits, pt or staff		
0800		safety issues, open A4's		
		-Review communication that needs to be passed on		
		in huddle		
0800-	Assess 10:00 staffing	-Update acuities(see Staffing based on acuity SW)		
0815	_	-Determine need to call off/call in staff.		
		-Determine room/staffing for next 3 admissions.		
		-Audit acuities with supervisor.		
0815-	Team huddle	-See Team Huddle SW		
0830				



"Culture is an idea arising from experience. That is, our idea of the culture of a place or organization is a result of what we experience there. In this way, a company's culture is a result of its management system...culture is critical, and to change it, you have to change your management system."

Creating a Lean Culture by David Mann



## Senior Leadership Support

Many struggles along the way.

Improvement methods have evolved over time.

Throughout it all, unyielding focus from Senior Leadership that doing lean is non-negotiable and lean is our strategy.

## Respect for People

- No Layoff Policy.
- Changes in Hiring.
- Reassignment Process.
- Learning to See.
- Candor with Respect.
- Learning Environment.
- People A3.
  - TIS Value Stream.
  - Human Development Value Stream.
  - Wellness Value Stream.



# Problems are Opportunities – Courage Failures are okay!! Honesty



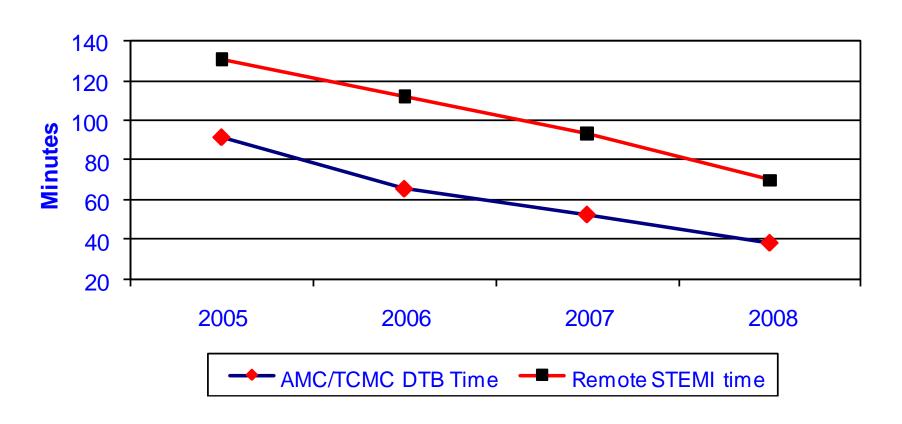
	Measure	Initial	Target	Projected 11-14-08	Achieved 1-29-09
Quality	Handoffs	42	21	31	34
Quality	Patient Satisfaction -Overall {Rated very good or excellent}	80%	95%	TBD	90%
Quality	Waste	74	37	39	39
Business	Total Cycle Time {Follow-up patients}	11-30 min	5- 15 min	6- 19 min	7-17 min
Employee Engagement	Staff Satisfaction	2.5	4	4.8	4.8
Employee Engagement	1 <sup>st</sup> RIE – 2 <sup>nd</sup> or more RIEs -	2 7			



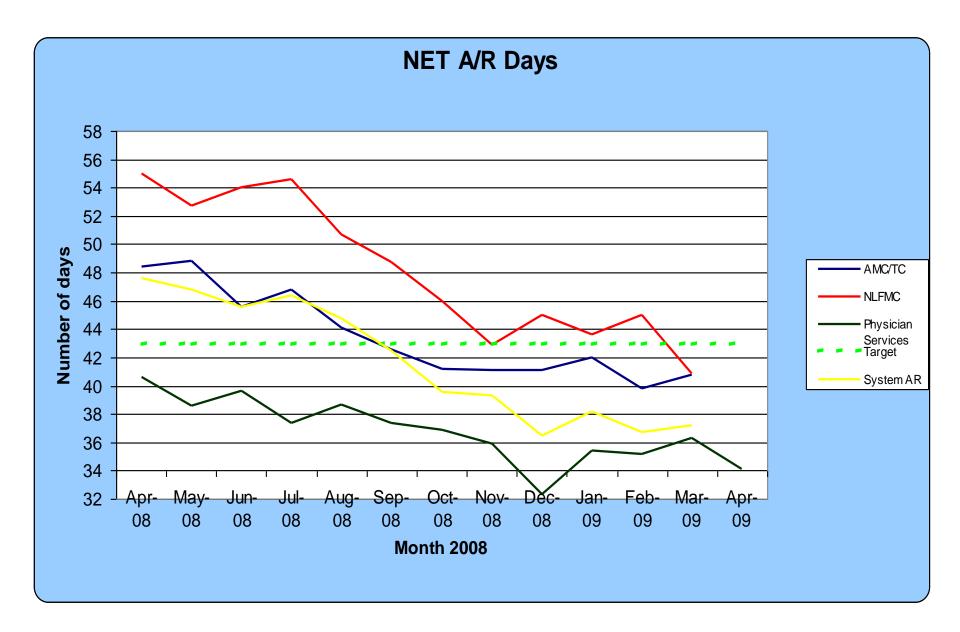
## **Real Results**



# Rapid Heart Attack Care (Code STEMI)

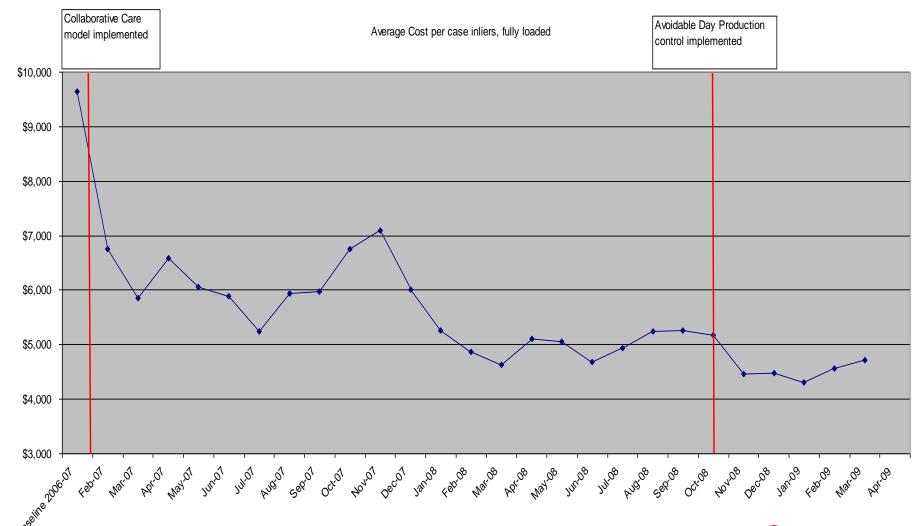








## Cost per Case



## Collaborative Care Outcomes through 2010

Measure	Pre- Collaborative Care (2006)	End of 2007	End of 2008	2009	2010	Compares to non- Collaborative Care units thru 2009
Defect-Free Admission Medication Reconciliation	1.05 defects per chart	0.01 defects per chart	0 defects	0 defects	0 defects	1.25 defects per chart without RPh
Patient Satisfaction (number of patients rating care 5 out of 5)	68%	87%	90%	86%	95%	Not captured for other units.

- •Financial Indicators represent a subset of the patients to demonstrate impact of the delivery model. Excluded from both baseline and pilot are: observation patients, ICU patients, and LOS >15 days. Pilot numbers includes: Admits from ED to Unit, or direct admits to unit. 2006 is updated baseline.
- •Case mix was not significantly different between collaborative care and non-collaborative care
- •Updated from: "Writing the new playbook for health care: lessons from Wisconsin," 2009, *Health Affairs*, 28, p.1348
- •Copyright © 2011 ThedaCare. All Rights Reserved.



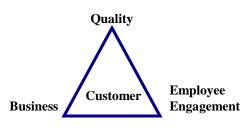
## Collaborative Care Outcomes through 2010

(Continued)

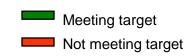
Measure	Pre- Collaborative Care (2006)	End of 2007	End of 2008	2009	2010	Compares to non- Collaborative Care units thru 2009
Length of Stay* (In days)	3.51	2.92	3.09	3.05	2.91	3.5
30-day re-admission rate	No data	No data	13.98%	13.7%	12.9%	15.2% (2009) 14.7% * (2010)
Average Cost Per Case* (using Medicare RCC) and restated in current dollars	\$6512	\$5024	\$6326	\$5789	\$5781	\$7775



<sup>\*</sup> This is all medical surgical unit re-admissions from a comparable non-collaborative care unit in the same hospital



## **Confirmed State**



#### Data is for Isolated Coronary Artery Bypass Graft (CABG) Patients

	Measure	Initial (2007)	Society of Thoracic Surgeons (STS) "National Average" (2007)	Target	Achieved Aug- Jan Combined
Quality	(Decrease) Percent of Patients Experiencing Postop Atrial Fibrillation	30%	21%	15%	17%
Quality	(Increase) Percent of Patients Off of the Ventilator in < 6 Hrs Post-op	27%	33%	54%	66%
Business	(Increase) Contribution Margin per Case	\$6,900	NA	\$9,100	\$9,999 (Aug '08 – Dec '08)
Employee Engagement	(Increase) % of Open Heart Surgery Care Team Members Involved in Value-Stream Improvements (VS, RIE, Project, A4, Team Leader/Core Team Member)	0%	NA	100%	77%



Community of Problem Solvers!



**Tracking Board** 





Patient Flow Board

THEDA CARE

## ThedaCare Improvement System

## Pillars of Success

Respect for People Continuous Improvement



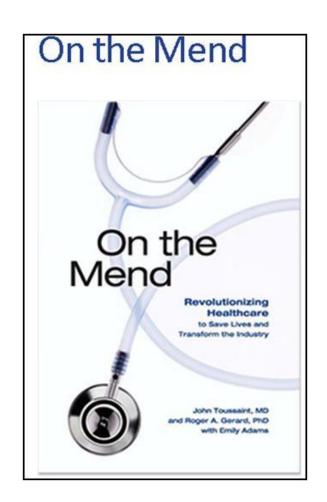
## **Further Lessons Learned**

- Adopting lean means adopting a new way of leading.
- Involve customers wherever possible.
- Communicate early and often to line staff.
- Engage key stakeholders.
- Teach people to fish don't just give them the fish (ask questions, don't give answers).
- Once you've implemented a change, you've only just begun (you're only at the 'D' in PDSA).
- Don't underestimate the pull of process to go back to their original state, regardless of how great the new process seems.



## Action Plan – taking the next step

- 1. Identify the crisis.
- 2. Create a lean promotion office.
- 3. Find change agents.
- 4. Map your value streams.
- 5. Engage senior leaders early in strategy deployment.
- 6. Acquire and disperse knowledge broadly.
- 7. Teach a man to fish.
- 8. Involve suppliers in lead.
- 9. Restructure your organization into product families.





# What are some things we're working on now?

- Continuing to implement a standard management system.
- Aligning Leadership structure under key business lines Looking to improve the value streams around delivery, development, and support.
- VSA of Human Development (3<sup>rd</sup> pass) and working on the execution of that value stream action plan.
- Through using lean, reducing expenses by \$60 million through 2015.
- Improve productivity 3% annually.
- Maintain expenses neutral year over year.
- Standard work: teaching, observing and coaching to SW.



**A Community of Problem-Solvers Delivering MBV** 100% of employees Lean "Grad" are problem-**School** solvers improving something every Education/Skill Level day!!! K We are Here ?? 5 10 15 Time (years)

## Questions?



## Resources

Lean Enterprise Institute: www.lean.org

ThedaCare Center for Healthcare Value: www.createhealthcarevalue.com

Healthcare Value Network: www.healthcarevalueleaders.com

